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THE MEDICAL DIRECTOR OF THE WORLD'S FAIR.

The office of Medical Director of the World's Fair will be an important one. Not only will the best plans for prompt medical and surgical relief be required, but there should be the greatest care for the best sanitation during the building, grading of the grounds, and the perfection of the general arrangements.

We suggest, first, that the office be created with a full sense of the responsibility attached. There will probably be more people here during the hot season than have ever been assembled in mid-summer in this latitude. An epidemic of a large number of fatal sun-strokes or a great accident, would be disastrous beyond compute.

To avert such a possibility there should be the best methods for securing plenty of pure water, good drainage, cool rest-places, and stations for medical and surgical emergency cases. Not only should there be a director, but he should be provided with a large corps of competent assistants. For climatic reasons, as well as for many others, the medical staff cannot be organized too carefully.

The medical director should be the most available and the most efficient man that it is possible to secure. He should have had experience in this work. He should be one who is willing to sacrifice something, if need be, for there will be a vast amount of work, and the office will be no *sinecure*. He cannot be entirely guided by the experience of the directors of other expositions, for the conditions here will be unusual.

Such an office should command a good salary. The service that is demanded cannot be given by a mediocre. It should be of the most intelligent, practical and scientific order. Most of all, the office should not be filled as the result of petitions, personal influence or political favoritism. We want the best man for the place, and the profession of the city will do well to see that only the best man gets it. W. P.

THE PROBLEM OF EVIL.

The question of an explanation, scientific or otherwise, of the problem of evil in the world, may seem at first thought somewhat remote from the interests of the readers of a journal devoted to the practical science of medicine. Yet it is certain that, historically, the popularly accepted explanation of evil has had immense influence upon the development of that science. There were long centuries during which doctors of physic were looked upon askance, and a knowledge of drugs was believed to be evidence of relations with the evil one; and the more effective these drugs in relieving pain the more conclusive was thought to be the evidence of witchery, for, so it was reasoned, evil, of which pain and sickness are a part, comes from the devil, and therefore that which relieves it must come from the devil also.

In modern times we have discarded the idea that evil is the result of sin, and have attempted now and then to give to it a rational or scientific basis, one consequence of which has been certainly a much more rapid development of the science of medicine than could otherwise have been possible. But it does not follow by any means that any generally accepted explanation of the problem of evil has been established. Indeed, there is, perhaps, less unanimity of opinion on that point now than there was when the theological explanation satisfied everyone save, perhaps, a few individuals who were less simple or more disagreeable than ordinary folk. Some tell us that evil is a mystery not to be explained; others that it is possible only in a world governed or misgoverned by blind force; still others console us with the thought that the individual is sacrificed to the race, and that evil for the individual is necessary for race perfection; while we have recently been assured by a brilliant and versatile writer that evil is, after all, merely a relative term—that good, in other words, is only a lesser evil, and evil only a lesser good.

Recently there has appeared a new solution of the problem of evil which is not without interest. M. Bourdeau, writing in the *Revue Philosophique* on the *Cause et Origine du Mal*, suggests a solution which is somewhat as follows: Every organism is an aggregate of simpler organisms co-ordinated into a whole, and is itself a part of a still larger aggregate. There is, therefore, in each organism two principles working in opposition —the principle of harmony and the principle of strife. The principle of harmony is due to the co-ordinating influence of each organism over the smaller organisms which compose it; the principle of strife is due to the

egoistic opposition of each organism against the larger organism of which it is a part. Each organism has a keen sense of its own needs and tendencies, but a less keen sense of the needs and tendencies of the organisms of which it is composed, or of the organism of which it is in turn a part. This inevitable discord is the cause of evil—it *is* evil. It is a conflict which is universal, and the constant expression of which may be seen in man, in nature, in society. Last and most intolerable evil of all is death, which is nevertheless the necessary foundation and condition of life.

This surely is interesting, but what, after all, does it tell us of the cause and origin of evil? It shows us, rather, that evil is the result of the conflict, perhaps the necessary conflict, of forces. That we knew before. But what causes this conflict, and why is it a necessary one?

TUBERCULOSIS A CURABLE DISEASE.

Most physicians concede this proposition as a generality; when it is applied to the individual, they doubt. Doubt is a confession, and confession premises surrender. If we were to say that the average case of tuberculosis is more amenable to treatment and more susceptible of cure than a case of almost any other chronic disease with a tendency to fatal termination, would it be considered extreme? Yet that is exactly what we mean.

When tuberculosis shall have been better understood, when results from the most trustworthy sources shall be further investigated, and the conditions upon which favorable termination depend fully realized, the disease will have lost its terrors for the public, and physicians will take charge of the case with the same energy and expectation with which they accept the responsibility in pneumonia or diphtheria. Why should they not? The element of infection is more virulent in these diseases, and the attack upon the vital force more immediately aggressive, yet in these cases the physician has to win, and does win, a battle in a fortnight; whereas in tuberculosis, with a much longer time at his command and the factors of disease not nearly so active, he too often folds his hands when he sees the bacilli or hears the crepitant rale, and advises cod-liver oil and change of climate.

It is true that the bacilli are diagnostic of tuberculosis, but they are not the death-warrant of the patient. It is true that cod-liver is a food for some, and that change of climate aids others, but these are only a part, and, we believe, a small part, of the true physician's armamentarium. Already we can see the results of recent investigations and careful confident treatment. The death-rate is decreasing in many sections where patients are crowded together, as in places which have become famous through the press. The highest authorities and the most conscientious sanitarians are showing better results each year. Just as in diphtheria the quicker battle is won by increasing vital functions and antagonizing specific germ conditions, so in tuberculosis the longer the struggle is won

by aiding repair and opposing germ infection and colonization—with this favorable addition: in tuberculosis the physician has a longer time and, we believe, a less virulent infection, but he should be just as careful and prompt in meeting every indication as in the more active disease.

W. P.

DISEASE OF THE PANCREAS.

Clinical observations in diseases of the pancreas are few and far between. Most of the information on this subject is gleaned from dead-house records. Diseases of the pancreas, as it is well known, seldom make themselves manifest by pathognomonic symptoms. Acute hemorrhagic pancreatitis, about which so much has been written, and about which so little is known, is a common enough condition, but often is not diagnosticated. In the writer's service in a pathologic laboratory abroad, not less than ten cases of pancreatitis hemorrhagica acuta were observed at autopsy during the space of one year, and yet not one of them had been diagnosticated. The etiology of the condition is also clouded. About the only symptom that points to trouble of the pancreas is severe abdominal pain, and yet that is not always present. It is a fallacy to assume that diseases of the pancreas always cause glycosuria. Glycosuria is sometimes met with, it is true, in pancreatic disturbances, but yet it is more often absent and hardly deserves mention. Clinicians must confess that they "can't get at" this organ until they elaborate other means of detecting lesions in it.

The key to the situation lies, as usual, in solving the physiologic relationship of this organ to the rest of the organism. There *must* be something in the function of the pancreas that we haven't unraveled. Its pathology suggests that: let the laboratory physiologist do the rest.

THE PARASITIC NATURE OF ECZEMA.

Unna, of Hamburg, has persistently claimed that his morococcus is the cause of eczema. He has found it in many cases and insists that it is a specific organism for this disease. When we consider the nature of the disease, the pathology, the course and the general manifestations, we must agree with the anti-morococcus school, that the disease eczema is not a parasitic one in the strict acceptance of the term. In first order, Unna claims that he finds it in cases of eczema, and that he can reproduce the disease with it. Others have failed to do this. Unna says that eczema is a contagious and epidemic affection. The whole history of the affection shows conclusively that it is not a contagious disease. It is not even possible to prove that it is auto-inoculable. Those who favor Unna's teachings say that it is auto-inoculable because when a patient scratches another part of his body there appears at that site an eczematous patch. This proves nothing, since eczema is liable to appear at any part of a patient's body who has a predisposition for the disease. Jadessohn says truly that the disease depends both upon a general and a local predisposition, and a chemical or mechanical irritation at the site of eruption of the

process. Secondarily, micro-organisms can get in their depredations and produce a mixed infection, such as a purulent state, etc. Many investigators have conscientiously endeavored to find the morococcus in fresh eczematous patches, and without avail. Galloway, of London, says that his cultures from fresh eczema were absolutely negative, and that later, when the disease had further developed, he only succeeded in finding some varieties of the staphylococcus of the skin at the affected sites. Brocq and Veillon, of Paris, also have investigated the disease and positively affirm that in the fresh, primary lesion of eczema—*i. e.*, in the vesicle, there are no organisms. Kaposi, the great dermatologic genius of Vienna, is also one who has sought in vain for Unna's morococcus. Others of renown in the dermatologic world have come to the same conclusion. The Unna doctrine two years ago was received with enthusiasm, but now, after cool deliberation and search, the dictum seems rational that eczema is not a parasitic disease. This is the same old story of too much eagerness to attach the nature of parasitism to something which is remote from it.

PROPHYLAXIS OF GONORRHŒA.

From time to time we are confronted with new remedies for the treatment of that very common affection, gonorrhœal urethritis. For the most part these remedies are heralded with much pomp and power of cure, and, in most cases, after conscientious trial, it is found that the new "specific" is an empty bubble and capable of curing but few cases.

In the last few months, ever since the appearance of W. Frank's paper, medical literature is beginning to teem with the reports of the successful abortive treatment of gonorrhœa by means of protargol injections. It was W. Frank who first discussed this subject. He recommended that a drop of a twenty per cent. glycerin solution of protargol should be instilled into the fossa navicularis post-coitum, and that this would surely prevent the development of gonorrhœa in exposed cases. He reported numbers of cases where this had proved successful. Since the appearance of Frank's article on this subject, numerous other workers along the line of genito-urinary diseases have also reported favorably upon this new treatment, and we are now of the opinion that there must certainly be something "in it" to merit such wide-spread attention. Certainly, if this method is successful, it offers a new field for prophylaxis and treatment of this disease. It is in the line of preventive medicine, wherein it is easy to predict that most results are to be looked for; it is not Utopian to believe, therefore, with such a method of dealing with gonorrhœa, that the disease can eventually be stamped out. The treatment involves no complicated apparatus, and can be followed out by those whom we may be pardoned for designating "the most stupid," and so we welcome it, and say that all honor and credit should be given to him who first recommended it.

STAINING OF THE DIPHTHERIA BACILLUS.

Of late the subject of staining of the diphtheria bacillus has been occupying the attention of bacteriologists, and several new methods for specific staining have been brought forth. We know that with the method commonly used—simple staining with alkaline methyline blue—characteristic pictures of the Klebs-Loeffler bacillus have been presented. The picture referred to is the so-called "polar staining," whereby deep areas of blue are seen in the body of the bacillus with interrupted unstained spaces. Not content with this picture, biologists have been working on more improved methods. The method which seems most applicable to diagnostic purposes is that lately devised by Piorkowski, and described at length in the *Berliner klin. Wochenschrift*, March 4, 1901. He utilizes the basic principle of polar staining by beginning the staining with alkaline methyline blue for one-half a minute, the preparation being slightly warmed at the same time. The preparation is then decolorized for five seconds in a three per cent. HCl-alcohol solution. It is then washed off with distilled water and counterstained with a one per cent. watery solution of eosin for ten seconds. The preparation then placed under the high power lens presents the following picture: diphtheria bacilli show deeply stained areas of blue; intermediate spaces are stained red. The method certainly is superior to the simple Loeffler method, and aids diagnosis.

Just as is the case in the original Loeffler method, so it is in this method of Piorkowski, that the beauty of the stain depends upon the presence in the true diphtheria bacillus of the so-called metachromatic nuclei, which are the unstained spaces referred to in the Loeffler method. Much speculation as to the significance of these unstained areas has been rife among the workers with this organism, but as yet the problem seems far from solution. That they are sporogenous seems out of the question. That there is a relationship between these metachromatic nuclei and the virulence of the organism seems probable, inasmuch as their presence betokens the existence of true diphtheria as contrasted with their absence when we are dealing with the so-called pseudo-diphtheria bacillus. According to the dictum of Marx, "a bacterium loses its virulence coincidently with the disappearance of the Babes-Ernst nuclei."

So far nothing definite has been experimentally proved in this connection.

LECITHIN IN THERAPEUTICS.

Gilbert and Fournier have reported some favorable results obtained with the use of lecithin in certain conditions. It had a decided effect on nutrition in general in these cases. Lecithin is said to favor the assimilation of azote and of phosphorus, according to the observations of Desgrez and Zaky. The lecithin which was used in these experiments was obtained from the yolk of egg. Lecithin is without toxicity administered subcutaneously, by the mouth, or intra-peritoneally, in doses of two to five grammes, or in smaller doses longer continued. Fed to animals, particu-

larly young animals, marked increase in weight is noted. In man lecithin is employed in pill form—0.10 to 0.50 gms.—or in subcutaneous injections in oil—0.05 to 0.15 gms. every day. In tuberculous patients with advanced lesions, treated with lecithin, it has been noted that there ensues an increase in appetite, gain in weight and a general improvement. In two cases there was observed diminution in the cough, in the quantity of sputum expectorated and dropping of the number of bacilli therein. Particular attention was given to the use of lecithin in cases of neurasthenia and general functional diseases of the nervous system: in such cases improvement in the general state followed its use.

From the above remarks it is to be seen that we have another new remedy which has given good results and which deserves extended trial. That it is without toxic effects warrants its liberal use, and that it has given good results in such obstinate diseases as tuberculosis and neurasthenia, still further warrants assiduous efforts in its trial.

THE "IL-LITTERATEUR" IN MEDICINE.

One of the most reproachful things that we can imagine is to see the illiterate writings of some of our profession in the medical journals of this country. Every now and then we come across an article in the columns of—well, a medical journal so styled—portraying clearly the stamp of ignorance and illiteracy. It is an open proof of the standing of some of the profession as regards education and training. Not to speak of the ignorance of medicine seen therein, which goes without saying, these articles show clearly that there are practitioners who have crept into medicine either on false pretenses or through the kindly offices of the "wild-cat" medical colleges. Their writing shows a lamentable ignorance of all things, and represents a weird distortion of the King's English. 'Tis sad indeed that there are doctors who know so little—how much sadder is it to reflect that they must show their ignorance in print! It is a curious phase of human nature that those least adapted to writing seem most bent on it. The perusal of such work can well explain why the status of the doctor in the community is falling year by year. If it continues, it can safely be asserted that that small amount of respect that is now shown by the laity in this country towards our profession will speedily be dissipated, and that we will shortly be put on a par with the tradesmen. In contrast to this, look at the standing of the medical man abroad. In Germany, for instance, the title of "Herr Doctor" carries great respect. There the medical man occupies that position in society that is deservedly his. There the title is taken to mean a man of education and culture, not a crude thing rushed through a saw-mill medical college and turned adrift on the helpless community. It is sad to reflect on this matter and to realize how we are falling in the estimation of the people. We are poorly represented ofttimes in this country by our ignorant brothers, and it becomes a case of indiscriminate classification of a part for the whole on the

part of the laity. We can only arrest this spirit by attempting to exclude untrained men from our profession. Our medical college system must be made more thorough as regards requirements for admission. The day has long ago passed by when the study of medicine consisted in reading a couple of musty medical books in a doctor's office. Medicine has developed to such an extent that he who now enters it and who would hope to compass all that is known therein and who would progress with it, must be a man who has had the broadest kind of a liberal education and must be, withal, a man of independent thought and action, not a clown.

EPIDEMIC PAROTIDITIS.

Mumps is with us here in St. Louis, and bids fair to assume epidemic proportions. While the fatality connected with the disease is practically *nil*, still it behooves the practitioner to watch his patient with mumps, be he small or large. The disease is one which, fortunately, tends to run its course evenly without any alarming symptoms or complications; and yet, exceptionally, we see cases complicated with such a thing as orchitis, with lung involvement, and often with intestinal derangement. A complication which is rare, but which has occurred, is an affection of the pancreas—hemorrhage into the pancreas and subsequent gangrene with fat emboli, etc. Mumps needs no special treatment beyond watching, nursing and hygiene in general. Still it is troublesome and uncomfortable, especially when it strikes the hapless adult. Strict quarantine should be maintained, as it is intensely contagious.

"HEAD-KNOCKING" IN RACHITIC CHILDREN.

The phenomenon of "head-knocking" is one which is seen in some rachitic children. It consists of a constant motion of a rachitic child whereby it strikes its head with considerable force against articles of furniture, pillows. It is commonly seen in the children of London, where this disease is so common. The writer has also observed it in rachitic children in Germany's metropolis, where "die Englische Krankheit" (the English disease) is rapidly increasing in point of numbers. There is no suitable explanation or hypothesis for this phenomenon, and it remains for the neurologist to explain it to us.

Aldrich, in the *Annals of Gynecology and Pediatry* for March, 1901, reports a case of this kind, and dwells at some length on the medico-legal side of the thing. He mentions the fact that these children can produce severe bruises in this "head-knocking," and were such a child to die, interesting complications would ensue should the case come before a coroner's jury: why should they not say that the guardians or care-takers of the child had maltreated and beaten it? This is a point well taken and should be emphasized. The laity would immediately jump to such a conclusion, and of course would be entirely wrong in their position.

CLINICAL LECTURE.

APHASIA; SCIATICA; NEURASTHENIA; PROGRESSIVE MUSCULAR ATROPHY ASSOCIATED WITH LOCOMOTOR ATAXIA; MULTIPLE NEURITIS; BROWN-SEQUARD'S PARALYSIS; PROGRESSIVE MUSCULAR ATROPHY.[1]

By Daniel R. Brower, A. M., M. D., LL. D., of Chicago, Illinois,
Professor of Nervous and Mental Diseases, Rush Medical College, etc.

Ladies and Gentlemen:

WE HAVE here a case in which the first symptom was interference with the speech, inability to convey his ideas in writing and speaking, although he could make himself understood by signs. It is a case of aphasia for speech and writing. There is also a disturbance of the sensory and motor functions on the left side of the body. There is a marked exaggeration of the patellar reflex on the same side. We get a good leg reflex by moderate tapping, but we get nothing on the other side. The plantar reflex is also very much exaggerated. Touch him anywhere, and the foot responds violently. Babinsky's reflex is the toe reflex, and we must hold the foot in order to elicit it. The foot reflex being so exceedingly active, we have some difficulty in getting Babinsky's reflex. It is one of the great difficulties that we meet with in this class of cases. Babinsky's reflex is present, although somewhat modified. The elbow reflex and arm reflex are also very active on the left side. On the right side, it is very slight; the same amount of tapping does not produce as violent a reflex as on the opposite side. He also complains of heaviness, paresthesia, and dysesthesia of that side. The dynamometer records a strength of seventy-five on the left side, and ninety on the right side, showing a slight diminution of power in the affected side. The left leg is also slightly involved, as is plainly seen when he attempts to walk. There is a very slight tongue deviation.

Now, what is involved? Is it the upper motor neuron or the lower? A week ago we went considerably into the detail of the symptoms that differentiate disease of the upper neuron from disease of the lower. There is no apparent loss in nutrition, no atrophy of the arm in this case. Taking all the symptoms into consideration, we are warranted in saying that it is a lesion of the upper neuron. What is the probable pathological basis of this disturbance in function? There is no specific history in this case, no heart lesions, a very slight change in the nutrition of the radial

[1] A Clinical Lecture delivered at the Cook County Hospital. Reported expressly for Interstate Medical Journal.

arteries, but the temporals are not at all tortuous, nor hard. I think that there is possibly a change in the carotids. We have no positive or absolutely certain method of differentiating cerebral thrombosis, embolism, or hemorrhage during life. The best we can do is to approximate in the diagnosis. When there is no cardiac lesion, we can, as a rule, throw out embolism. With a man at this time of life it may possibly be thrombosis or hemorrhage, but in the absence of any specific history and with the degeneration of the arteries, the probability is strongly in favor of hemorrhage. It is possible, although not probable, that this man being overworked and having used his speech center a great deal in the way of dictation, may have a cerebral congestion with localized effusion. Had this been the case, however, the exudation would certainly have been entirely removed, as his trouble dates back to April last, and normal function restored. Inasmuch as there has been no restoration of function on the affected side, I am very much inclined to think that a much graver lesion than congestion and exudation took place. I am sure that he had a small hemorrhage sufficient to interfere with the speech center and voluntary motion on this side.

What is to be done? Efforts should be made to diminish the arterial degeneration, and that is best done by the administration of alteratives and alkalies. Five grains of iodide of ammonium and five grains of the carbonate of ammonium make a good combination for increasing the alkalinity of the blood. Then there should be some diminution in the amount of cerebral function. This man also seems to be suffering from a general anemia, and he should, therefore, be given tonics. His bowels should be well regulated and the kidneys given careful attention. His diet should be limited and regulated. I do not think that there is any doubt about the fact that the consumption of too much red meat tends to promote arterial degeneration. That should be diminished; also the amount of sugar and sugar-producing foods. Galvanism to the brain yields very good results. The large positive electrode is put over the forehead, and another at the nucha, sending through the brain a current of from two to five milliamperes. Galvanism is just as useful as an alterative and a tonic, as it promotes absorption and nutrition.

SCIATICA.

These are two cases of sciatica. This man is thirty-eight years old; previous history is good. Present complaint: For the past four weeks he has had a constant dull pain in the posterior portion of the left leg, extending from the hip down to his foot. Sometimes the pain becomes sharp and shooting in character. It is increased by motion, and decreased by warmth. During the past week he has been unable to retain food. This is a very good description of sciatica, an exceedingly commonplace disease. This is a season of the year in Chicago when you will see a great many of these cases. It is, therefore, important that we should be able to make a

correct diagnosis. The locomotor ataxic patient also has pains in the leg, but sciatica has a few symptoms which are peculiar to itself. In the first place, it is a neuralgia of the sciatic nerve, and, like most neuralgias, it has its puncta dolorosa. There is a tender point in this case over the sciatic notch just behind the great trochanter; there is another in the popliteal space, and another tender point behind the outer malleolus, behind the head of the fibula. Frequently one is found on the dorsum of the foot. His face shows conclusively when we strike a tender point. When you have found these punctæ dolorosa, the diagnosis of sciatica is fairly well assured; and yet every now and then errors in diagnosis are made. Another pathognomonic sign is obtained by putting the leg in a state of extension, and then raising it to a little more than a right angle with the body, when pain is felt all along the limb. Hip-joint disease sometimes produces an inflammation of the sciatic nerve. The symptoms of sciatica may then be so pronounced as to completely obscure the hip-joint trouble. Having made the diagnosis of sciatica, we must next determine whether the nerve is inflamed externally—that is, outside of the notch, or within the pelvis. This is exceedingly important. You will search the abdomen with great care by palpation, examine through the rectum, and in women through the vagina, making sure that you have no complication or pelvic source of disease. Another way by which you can eliminate pelvic disease is to inject into the sciatic nerve, just behind the trochanter, a solution of cocaine. If the disease is external to the pelvis, the pain will disappear; if is intrapelvic, there will be no lessening of the pain.

Having determined this, the next point is to ascertain the etiology. You will inquire as to the antecedent history of the patient, specially as to rheumatism. Our patient had an attack of rheumatism lasting ten weeks four years ago. Gout, rheumatism and malaria are, in this part of the world, the principal causes of sciatica. This being a rheumatic case, the internal treatment is plainly indicated. The great antirheumatic remedies in sciatica are the iodide of sodium, the salicylate of sodium and the wine of colchicum, as follows: Sodium iodide, two and a half drachms; sodium salicylate, five drachms; wine of colchicum seed, three drachms, in some convenient vehicle. The best vehicle is essence of pepsin. We will order a four-ounce mixture in teaspoon doses every four hours in much water. This combination will not only favor elimination of the rheumatic toxins, but it is also a sedative. If the patient is in great pain, give him, in addition to this mixture, a capsule containing bromide of quinine, two grains; acetanilid, one and a half grains; and to guard against the depressing effects of the acetanilid, we will add one-sixth grain nux vomica, which is also a tonic to his nervous system. He will take one capsule every four hours. Galvanism is also of great service in these cases. It is not only a pain-reliever, but an aid to restoration. We will put one electrode at the small of the back, and the other we will run along the sciatic nerve with a current of about five milliamperes. In the

early history of these cases galvanism should be given daily and without breaking the current. If you break the current, you produce pain. The application should be made for about ten minutes. In the interim of the galvanic treatment the limb should be treated with either hot or cold, the effects of high and low temperature being almost identical in these cases; hence follow the patient's preference. The limb should be enveloped in the application. An admirable way to apply heat is to make a good, long narrow bag and fill it with sand. This retains heat for a long time, and in addition will also immobilize the limb. Cold is applied by means of the ice-bag. These patients should have rest, as it takes a long time to cure sciatica if the patient is running about. If the patient has an antecedent history of gout or malaria, strike out the salicylate, increase the quinine, and add arsenic; if due to anemia, add iron. Sometimes the pain is so intense that the acetanilid must be given in larger amounts or a hypodermic of cocaine injected around the nerve. Cocaine is better than morphine, and there is less danger of creating a habit. Some of these cases will bother and perplex you, no matter what you may do.

NEURASTHENIA.

This case is representative of a large family of cases. She is thirty-one years old; mother died in childbirth; father died of pneumonia. She had measles at 8, pneumonia at 14. Menstruation began at 13, and has always been irregular. Three years ago she was curetted. She has had eight children and three miscarriages. Labors were nearly all difficult, one requiring instruments, and another was a breech presentation. She has never been strong. You see, she has had a good deal of strain on her nervous system all her life. Her present illness began about two years ago, at the beginning of her pregnancy. She felt very weak until about the sixth month of pregnancy, when her general health improved. Toward the close of the pregnancy her weakness returned, together with peevishness and general malaise. Following her pregnancy she caught cold and the flow stopped. She had fever, vomiting, abdominal tenderness and tympany. Since then she has developed a sensitiveness to noise, drowsiness, chilly sensations and dizziness. She has not menstruated since two months ago, and has been constipated ever since. She has pains throughout her body, and especially in her limbs. No blood count has as yet been made. She has a very feeble and rapid pulse. Her temperature throughout the illness has been practically normal. Urinalysis shows no albumen, no sugar, rather low specific gravity, acid reaction. I have no doubt that a blood record would show a low hemoglobin index and a reduction in the red cells.

The symptoms and history of this case are very plain. There is exaggerated patellar reflex, faucial reflex, no ankle clonus; the pupils are not dilated. When faucial reflex is absent in a case like this, the probabilities are always in favor of hysteria, pure and simple. In this case,

however, the slightest touch on her palatine muscles at once produces a reflex response. This is a very common case, much more so than the sciatic case. It is a case of neurasthenia, or nervous prostration. The great majority of the symptoms are subjective. Bodily nutrition is almost always perfect. The skin, muscular and subcutaneous tissue are all in a state of good nutrition. The pabulum that these tissues require is nothing like as rich as that required for the nutrition of the brain and nervous system. One of the most uncomfortable subjective symptoms that this class of patients experiences is insomnia.

If these cases come to you early, there is no treatment so valuable as is the rest cure devised by Weir Mitchell; but you will make a great mistake in applying it in advanced cases. The rest cure consists of putting the patients to bed, carefully regulating the diet, but giving them as much as their stomachs can take care of; together with this, daily massage and faradic exercise of the muscles; then bathing and entertaining. The rest cure is a splendid thing if properly carried out. The patient's whole time is taken up in the efforts of cure. There is less intro- and retrospection, the mind being kept busy with something continually. In addition to these measures, such remedies are given as the general condition commands. Some require iodides or salicylates or quinine or some other drugs. This cure will take about eight weeks, and must be followed by gradual exercise of the arms and legs in the way of light gymnastics and walking. Attend to efficient elimination throughout the entire course of the cure. Many of them have constipation and deficient renal elimination, and unless you attend to this the rest cure will amount to nothing.

Fortunately for these patients there is a hospital in every town of any consequence where they can go, away from family cares and perplexities, and receive the cure properly. Be sure and send your patient away after the cure is completed. Don't send them home, as they are very apt to relapse.

Progressive Muscular Atrophy Associated With Locomotor Ataxia.

This patient appeared in this clinic two years ago with well-marked locomotor ataxia and a perforating ulcer of the foot. He comes now with another ulcer starting on the other foot—a little bit of a hole, which looks as though it had been made with a gimlet. It will steadily grow larger. Notice the atrophy of the thenar and hypothenar eminences, and of the whole arm. Every now and then there are little fibrillar twitchings in the muscles of this arm. There is also progressive muscular atrophy of the shoulder. It is of interest to note that the locomotor ataxia and progressive muscular atrophy are associated. Locomotor ataxia is a disease of the posterior columns of the spinal cord. In addition to that trouble this man is now developing disease of the anterior horn. This is not very surprising. The disease has been located in the posterior columns for a long time and has now jumped over into the ventral horns. As in many of these cases, the

pains began twenty years ago, when he supposed he had rheumatism. At that time there was not so much known about spinal cord diseases as there is to-day. There is nothing to do but to treat the case symptomatically, make him comfortable and improve his nutrition.

Multiple Neuritis.

This patient is thirty-nine years old; a domestic. About two months ago she noticed a weakness in the hands and feet, and sharp, shooting pains in the forearms and legs. Three weeks ago the weakness became so bad that she had some difficulty in moving about. Unless she raised the foot very high she would always trip on her toes. Two weeks ago she had a chilly sensation, which was not followed by any fever. She has had no headache, cough or epistaxis. She has vomited, but not more so than before her sickness. For two days she has been unable to walk at all.

Notice the atrophy of the forearms and hands. There is fair extensor power. The flexors do not seem to be quite as strong as the extensors. There is no power that the dynamometer can record. With the strong faradic current there is scarcely any response. The muscles respond to the interrupted galvanic current, but the feeble flexors are not expected to respond to a current of the same strength as do the extensors. The electrical reaction and the pain are enough to base a diagnosis on of multiple neuritis, and to differentiate it from Landry's paralysis, in which the electrical reactions are just the opposite. Multiple neuritis has alcohol for its foundation.

Brown-Sequard's Paralysis.

This man, thirty-six years old, has a negative family history. He has never been sick before. His present illness began last July. He was at the well pumping water when the attack seized him, and he was unconscious for about half an hour. There was slight disturbance of both right and left sides, but he regained use of the right and now can use both legs fairly well. His left side still remains paralyzed. Nutrition does not seem to be disturbed; appetite is good, and there is no sign of muscular atrophy. The temperature sense is disturbed on the right side. He has no touch sense. On the paralyzed side there is increased sensitiveness and the reflexes are exceedingly exaggerated. The man is intensely emotional, and it was at first a question whether this was an hysterical or an organic lesion. We are now certain that it is organic, because the man was stabbed in the neck some years ago. He has a hemi-cord lesion—a case of Brown-Sequard's paralysis. You get paralysis on one side, and this interesting series of sensory disturbances on the other, because the sensory tracts decussate in the cord, and the motor tracts decussate up into the medulla. The treatment of this case is simply nothing.

Progressive Muscular Atrophy.

This man, a laborer, is fifty-four years old. Previous history is negative. Family history is good. He complains of pain in the left arm and

shoulder. His pulse is 72; temperature, 97.5°; weight, 160. The sensory condition seems to be normal. His steriognostic sense is not very acute. There is distinct atrophy of the muscles of the left arm, hand and shoulder, with fibrillary twitchings of all the muscles. Associated with such an atrophy we frequently find disorders of sensation, giving rise to the clinical picture known as syringomyelia. This is a case of progressive muscular atrophy, but it differs from the ordinary form in that it begins in the left arm instead of in the right, and the thenar and hyperthenar eminences are not involved.

Gower's treatment is the only treatment of any avail in these cases. It is the hypodermic injection of nitrate of strychnia daily, beginning with one-thirtieth grain, increasing the dose daily until you see some of the evidences of physiological activity. Then drop back rapidly and begin again. The nitrate is preferable to the sulphate. By pursuing this course you can sometimes benefit these cases very much. The general health of the patient must also be looked after.

Emergency Hospital at the Pan-American Exposition.—A very important consideration in these days of expositions and world fairs is the institution of an emergency hospital system on the grounds. There are many accidents of an emergency nature which occur as a result of a large assemblage of people, and untoward consequences are sure to ensue if there is no adequate means of handling such cases immediately. At the Columbian Exposition in Chicago and at the Exposition Universelle at Paris last year, the necessity of the existence of such an institution was well demonstrated, and the success attending the same more than compensated for its foundation. The same condition of affairs will exist at the Pan-American Exposition now being held in Buffalo, New York. A splendid hospital has been erected on the exposition grounds, and it has been equipped with all modern devices for handling emergency cases. A regular staff has been appointed, including the office of resident physician at the hospital. Wards for men and women have been arranged in it. Trained hospital attendants are there ready to lend their skilled aid. An ambulance system, made up of electric ambulances, and a working force is there ready to proceed to any part of the grounds after sick sight-seers. The whole system, has been carefully thought out and promises to do excellent work. It is under the direct charge of Dr. Roswell Park, who needs no introduction from us as a competent medical man. The patrons of the Pan-American Exposition are certainly fortunate in having such an institution connected with it.

ORIGINAL ARTICLES.

BRIEFS ON THE SURGERY OF THE GENITO-URINARY ORGANS.

By G. Frank Lydston, M. D., of Chicago, Illinois,
Professor of Genito-Urinary Surgery and Syphilology in the Medical Department of the University of Illinois.

Overestimation of the Importance of Residual Urine in Prostatic and Bladder Diseases.

FROM time immemorial it has been the custom of the physician, when confronted with a case of prostatic or bladder disease, in men past middle age, to immediately institute an investigation to determine the presence or absence of residual urine. Residual urine having been found to be present, the next step is to institute treatment which shall result in the systematic withdrawal of the fluid. The natural inference, from observation of this universal practice, is that the residual urine is considered to be the important element in such cases. One would suppose, from the frantic efforts that are made to discover and remove this condition, that it was the *fons origo* of all of the elderly patient's troubles. I wish to enter an emphatic protest against this rather fallacious notion and practice. Residual urine is a secondary matter. When a patient consults a surgeon before infection of the bladder has occurred, the urinary residuum is not only secondary, but of trifling importance. The danger incurred in systematic attempts at its withdrawal is so great, that no amount of benefit that can be derived will, as a rule, compensate for it. The urine is aseptic in the cases under consideration, and I believe it would be difficult to show wherein it does any great harm. The argument is advanced that unless these patients suffer from frequent and perhaps painful micturition, and a constant desire to urinate, with or without straining, and these symptoms are relieved by withdrawing the residual urine, we are forced to conclude that the latter is of necessity the cause of the symptoms.

Let us inquire into the relation of a small or moderate quantity of residual urine to increase the desire to urinate. It must be borne in mind that I am discussing now normal or aseptic urine, which exists in these patients until ill-advised efforts on the part of the physician or surgeon to evacuate it have sooner or later made it septic. The normal urinary desire is not in the lower portion of the bladder, but in the true vesical neck of the posterior urethra. This desire is not excited by the pressure of urine within the bladder, except in so far as this pressure of urine forces a greater or less quantity of the fluid into the posterior urethra, causing pressure upon the nerve filaments to urinary sensibility and exciting the urinary function. Under conditions in which residual urine exists, the

patient is advanced in age, the sensibility of the bladder is decreased, the lower portion of the bladder is pouched, forming a *bas fond*, and it is here that the residuum accumulates. This portion of the bladder is the least sensitive part of the viscus. Now, we are asked to believe that while the relatively sensitive and muscularly powerful bladder of the young subject will retain many ounces of urine without exciting urinary desire, the comparatively insensitive and less powerful bladder of the elderly patient resents the presence of a few drams or perhaps several ounces of fluid accumulated in the *bas fond*. The relief incidental to the passage of the catheter and the evacuation of the clear residual urine is, as already indicated, apparent positive proof of the correctness of the view aforesaid, and the acceptance of this clinical fact is established sooner or later naturally. As a matter of fact, however, the irritation which gives rise to the frequent urinary desire is located in the prostatic urethra, and is incidental to circulatory changes, to pressure, and irritation of the nerve filaments of urinary desire in this part. The passage of the catheter in the evacuation of the residual urine produces, by mechanical pressure and its passage through the structures which are the seat of the irritation, the same relief that would be experienced by the passage of a sound or the application of solutions of nitrate of silver. This does not occur in all cases, for it will be found that, despite the evacuation of the residual urine in many instances, the old man's troubles are increased *pari passu* with the frequency of the introduction of the catheter. This fact, however, has not appealed to the judgment of those who have believed that evacuation of the residual urine alone is the thing to be accomplished in prostatic disease. When the residual urine has become infected, as it does in the vast majority of cases, sooner or later after catheterization for its evacuation is begun, quite a different condition of affairs supervenes. The evacuation of the residual urine is now an absolute necessity, for the infected fluid bears an important relation to the urinary irritation by virtue of the constant infection by continuity of the affected mucous membrane and the frequent passage of the infected urine through the vesical neck. Evacuation of the residual urine and antiseptic irrigations are now essential. This condition is not the one at which the foregoing remarks are aimed. It is a condition, however, which might have been avoided had the aseptic residual urine not been accorded the importance which it did not deserve early in the case.

I wish to enter a special plea for attempts at palliation of the urinary irritation early in prostatic disease by sounds, instillations of nitrate of silver, and prostato-rectal massage as a substitute for the fallacious method of frequent evacuation of the residual urine. In some instances these measures will, if instituted early, retard or prevent the early development of serious prostatic disease. Where they do not accomplish the desired result, it is hardly wise for the patient to begin catheter-life, if the constitutional and renal conditions be good, and he can be induced to submit to a

radical operation. There has been entirely too much routine in the management of prostatic disease. The profession has been overshadowed by the dictum of the medical forefathers: (1) That the prostate is not susceptible to surgical treatment; (2) that hypertrophy of the prostate is essentially a senile disease; (3) that the only thing to do is to institute catheter-life as soon as the disease is discovered.

The surgeon has a right to demand the same intelligent co-operation of the general practitioner in the surgery of the genito-urinary organs that prevails elsewhere. No physician of intelligence at the present time allows his patients with ovarian tumors to go on without operation until they are *in extremis*. He recognizes that an early operation is, other things being equal, a successful operation. The reverse is true, however, in the case of the surgery of the genito-urinary organs. A man with an intractable, deep stricture or prostatic hypertrophy is turned over for operation only as a last resort, and when the notoriously inefficient, old-fashioned measures of treatment have failed; as is well known, they usually die. Cases are selected for the genito-urinary surgeon to operate on because they are in such bad condition that operation is a practical necessity. This is unfair, and a little more surgical rationalism in the study and management of these cases is demanded.

USE OF SILVER IN SURGERY.

By Edward Wallace Lee, M. D., of St. Louis, Missouri.

SILVER in its various forms has become an established material in wound-treatment. The elder Crédé was, I believe, the first to establish the germicidal value of silver in the treatment of ophthalmia neonatorum. The younger Crédé, of Dresden, has made most interesting experiments and arrived at very satisfactory conclusions regarding the use of silver and silver salts in wound-healing.

I had the pleasure of spending quite a time this last spring with Crédé in his hospital at Dresden. His first remark to me was that his hospital was not in a condition for him to do aseptic surgery, although he believed in it thoroughly, but was under the circumstances forced to do antiseptic surgery, perfect cleanliness being adopted so far as possible. He used the city hydrant water without being sterilized. The only antiseptic outside of silver and its salts was the bichloride of mercury, which was used for washing the patient, the hands, etc., instruments being cleaned by immersion in plain water. Crédé's results, I must say, are as satisfactory as those of any surgeon I have seen, which establishes beyond a doubt the truth of his theories regarding silver.

The following are some of the silver preparations used by Crédé: Pure metallic silver, which is non-irritating and distinctly germicidal.

The court plaster made in Dresden has a partial coating of metallic silver. A solution of metallic silver in distilled water is a non-irritating and non-toxic fluid. Silver gauze is made by soaking ordinary muslin in a strong solution of metallic silver. Silver lactate, a white, odorless powder, which can be kept unchanged in a dark bottle, one part of this being soluble in fifteen parts of water or albuminous fluid, in a strength of 1-1000 it kills streptococci and staphylococci in five minutes. Crédé prepares his cat-gut (or, more properly speaking, sheep-gut), after cleansing it in the ordinary way, by soaking it for one week in a 1-200 solution of silver lactate, drying it and placing it in alcohol. It is then ready for use. He prepares silver sutures and rubber drainage tubes in the same way. Silver citrate is a light, colorless, non-irritating antiseptic powder, it being less soluble in water than the silver lactate; an aqueous solution will kill ordinary germs in ten minutes. This solution is used for irrigating wounds and cavities. The silver lactate powder is most valuable as a dusting powder for flesh or granulating wounds. The silver ointment (unguentum argentum Crédé), made with the metallic silver or silver citrate is a most valuable remedy in cases of acute or chronic sepsis. It should be applied on healthy skin, the part first being thoroughly cleaned. It is readily absorbed, and causes rapid destruction of septic microbes acting in the system. This I have seen demonstrated a number of times in cases of puerperal sepsis and erysipelas. It is a most valuable agent in cases of acute or chronic orchitis and epididymitis. The Crédé gauze is generally applied first over the wound, after which other gauzes and dressings can be applied. It is most valuable in packing suppurating wounds or cavities. It makes the best first layer in the "Mikulicz drain," as it has a powerful antiseptic action on any suppurative surface.

Sonnenberg, of the Moabit Krankenhaus, Berlin, always uses this gauze for his drain tamponade in suppurating appendicitis, and it is wonderful to see its action; what was at the time of operation a foul-smelling, suppurating cavity, in forty-eight hours becomes a clean, healthy, granulating surface. Sonnenberg does not irrigate these abscess cavities, but mops them out with silver gauze (dry), then applies a bag of silver gauze which is packed with ordinary gauze. Good Crédé cat-gut is, I believe, the best form of cat-gut that we can use. It is strong, not too readily absorbed and decidedly and powerfully antiseptic. I have had considerable experience with Crédé cat-gut long before I visited Crédé in Dresden. That which I used was put up in sealed envelopes, sterilized by dry heat in the laboratory of the Ramsey County Medical Society, under the direction of Edward Boeckmann, of St. Paul, Minnesota, who followed out carefully the directions of Crédé, adding formalin to the alcohol.

I cannot imagine a more desirable suture or ligature than the properly prepared silver cat-gut, being strong, elastic, not too readily absorbed, does not rot with age, but grows stronger, and withal is *antiseptic*. I have used this silver cat-gut of Crédé's most everywhere that suture or ligature

was indicated—the ligation of large pedicles, in hernia, in peritoneal suture, intestinal suture, on the perineum and in the cervix uteri, in fractures—and to use in fractures of patella it is ideal. A case in point: Horizontal-bar performer fell from his bar while making the giant swing, striking on his left knee on the hard stage, producing a compound transverse fracture. I saw the case within fifteen minutes after the accident; there was a clean, lacerated wound extending into the fracture, which was complete. I washed off the parts with soap water and a 1-1000 bichloride solution, then with sterile water, and then with one per cent. sterile boracic acid solution. All clots removed, and all lacerated tissue cut away; the fractured ends were brought into normal position and held with hooks until I completed my suturing. The periosteum of the patella was united with continuous silver cat-gut. The rupture in the quadriceps extensor and ligamentum patellæ was also united in the same way. The external wound was closed with silver cat-gut without draining. The limb was put on a plaster cast and was not again dressed for three weeks, at which time absolute union of the soft parts had taken place without sign of suppuration. In a little over two months the man resumed his bar performances. Karl Lonstine, of Hamburg, has treated quite a number of fractures in the same way with most gratifying results. I have used silver cat-gut on ununited fractures of the humerus with good results. I believe that this form of suture can be used in any place where the strain is not required for a long time. Silver foil is a most excellent protective and antiseptic dressing. Bacteria will not grow in a medium placed on silver foil. In recent uncomplicated inguinal hernia the Bassini operation can be performed, using silverized cat-gut and most perfect results obtained. This material can be used on any hernia where the strain is not going to be too great.

Silverized silk has also been used and makes a most excellent ligature and suture; but the chemical process necessary for its preparation renders it friable and it loses its durability.

Silver wire has for years been used in surgery and will continue to be used. As a suture in hernia operation, where there is going to be a strain on the parts, it is justly entitled to first place. Silver wire properly applied becomes encysted and does not act as a foreign body. It does not cause suppuration. If the free ends of a silver wire suture are not properly taken care of, it will act as an irritant. I have used it with excellent results in inguinal, femoral and ventral hernias. In one case of ventral hernia of over forty years' standing, where the opening was large enough to admit my fist, I closed the wound with twelve silver wire mattress sutures. The operation was performed in 1888; in 1897 the old lady died of acute pneumonia; post-mortem revealed my sutures intact and as bright as the day when they were applied. I have also observed most excellent results in the treatment of ununited fractures by the use of silver wire. In vesico-vaginal fistulæ, lacerated perineum and lacerations of the cervix uteri, silver wire is in many cases the best suture material, especially

where we are dealing with parts that are not absolutely aseptic. A. M. Phelps, of New York, used large quantities of silver wire in large hernias. He uses the wire for its mechanical support, putting in from twenty-five to one hundred feet; and in one case he used three hundred feet. He claims that there is no disturbance caused, and that by its use he is able to obliterate the inguinal canal. He places a mass of wire under and over the transversalis fascia, thereby securing a support that will not stretch as the tissues sometimes do, causing relapse.

Several cases of aneurism have been treated quite successfully by the introduction of silver wire. My personal experience in this matter has been limited to two cases of aortic aneurism. In neither one was the result favorable. In conclusion, I can state emphatically that the proper use of silver in its various forms has many indications in the field of surgery, as it is non-toxic, non-irritating, and a powerful antiseptic.

Linmar Building.

"POWDER MONKEY."

By J. J. M. Angear, A. M., B. S., M. D., of Chicago, Illinois,
Professor of Nervous and Mental Diseases and Clinical Medicine, Illinois Medical College.

AT THE close of one of Mr. Beecher's oratorical efforts he was asked: "How do you do it?" He replied: "I don't do it. I simply take what this little fellow (putting his finger to his head) gives me, and give it out to the people; that is all I do." This "little fellow" was an all-important and a very busy "little fellow," bringing forth newborn and undying thoughts of love and sympathy.

To take a naval figure: The magazine is the memory; the gunner is the speaker; the gun, the physical organs of speech; the "powder monkey" is the person whose duty is to supply the gunner during action with ammunition from the magazine. This is the "little fellow" up in Mr. Beecher's head supplying him with thoughts.

There is a psychological something—for want of a better and more elegant term—we will call the "powder monkey," whose duty is to bring the thoughts stored in the psychological magazine (the memory) and deliver them to the psychological gunner (the speaker), who, with more or less accuracy of aim and force of logic, bombards the citadel of his opponent.

This "little fellow" (the "powder monkey") is supposed to be perfectly familiar with the individual, intellectual magazine and its contents. During public speaking his ability is greatly taxed to deliver the required thoughts in the order, and as fast, and no faster, than the emitter (speaker) needs them. It is not simply quantity that is required, but the right kind and at the right time—*seriatim*.

The emitter (speaker) is able to do some assorting at the time, throwing back some thoughts and holding them for future use, and reaching after other thoughts for immediate use.

Every public speaker or good story-teller understands this well. He

knows that there are times when he may have selected and arranged them *seriatim* beforehand, but they will not come; he cannot command them. Where is that "little fellow," the "powder monkey?" Again, there are times they are on hand and clothed in their gayest attire. The speaker himself is astonished; literally, all he does is to open his mouth and throw out just what that "little fellow" gives him, and the audience is regaled and refreshed with the eloquence of thought and word. That "little fellow" is well and active. The "powder monkey" enters into the spirit of the battle.

In some forms of mania the "little fellow" is too active and reckless. The emitter (the speaker) is buried in his own thought; they are thrown in upon him in a higgledy-piggledy manner. His thoughts are mixed, confused, incoherent, because the emitter is not able to send out the thoughts in a consecutive order to be intelligent, nor fast enough to keep his desk clear; hence, he is said to be insane.

Doubtless in some persons there is a natural defect in this matter; if so, that individual will never be a good story-teller or lecturer. Public speakers, like poets, are born, and not made.

On resuming my college duties after an attack of cerebral thrombosis, I discovered that I was obliged to be very deliberate in my speech—not *staccato*—simply slow, steady, uniform. If I attempted to speak faster, momentary aphonia would occur, as if a cog or two had slipped in the wheel. Some might say that it was aphasia, which may be, in part; but I am confident that it was more aphonia, for as soon as I came down to my former deliberate pace all was well—no loss of words—but the gun would not go off.

Again, *common* technical terms were slow in coming, as neuritis. If they were not delivered in time, the common phrase—inflammation of the nerve—would take its place. This would be so quick that the audience would not recognize it. It annoyed the speaker. The audience does not know all that goes on behind the curtain.

Another and the most embarrassing difficulty was that the "powder monkey" and the emitter were not "Siamese Twins," working together and at the same time, as they should and do in a normal condition. They appeared to be two separate entities that did not and could not work at the same time; but the speaker was obliged to deliver the thoughts on hand and then wait for another batch of thoughts to arrive, and when the emitter had sent them out, wait again, and so on.

It seemed as if the lecture was chopped up into pieces instead of, as it should be, a steady and uniform flow of thoughts. There was no lack of thoughts, no lack of coherency—simply the thoughts were not delivered to the speaker in time. This was painfully embarrassing to the speaker, so painful that an inexperienced speaker would fail. This, again, was not noticed by the class.

Where does this "little fellow" reside, and by what name is he to be known?

ETIOLOGY AND TREATMENT OF DIABETES MELLITUS.

BY FRANK M. FLOYD, M. D., of St. Louis, Missouri.

IT HAS been my fortune to have several cases of diabetes mellitus under my care during the past three years. I have treated them to the best of my ability, and watched them become better or worse—usually the latter—until within the last year and a half. During the past eighteen months results have been far more satisfactory than ever before.

The term diabetes mellitus is used to define only a certain stage in a train of pathologic phenomena. The stages preceding diabetes mellitus rarely come under the physician's eye, and I am of the opinion that there are few men to-day who are capable of stating, with any degree of certainty, that any present set of symptoms will later be transformed into that set called diabetes mellitus. I know of no other condition so common in which the minority symptoms are as little known or so seldom recognized. The reasons for this state of affairs, I believe, are: first, that the symptoms are such that the patient gives them little attention; and second, that but a short time usually elapses between the first set and the appearance of the second set, called diabetes mellitus. As the knowledge of the first symptoms increases, the matter of cure will be greatly simplified, for even to-day we are moderately certain of a cure if the patient presents himself before the disease is very far advanced. To me the most interesting part of the study of this disease is its primary cause. In the cases examined and treated by me, I have used every effort to ascertain, in each instance, the first symptoms noticed by the patient and any preceding events of physical or mental importance to him. I have found that the patient, in many instances, gave a clear history of some event that caused him to be very greatly disturbed mentally, and that very soon thereafter the symptoms of the diabetes became sufficiently prominent to attract his attention. The history and symptoms of a few cases made them appear to be of possible bacterial origin; a few others exhibited the symptoms soon after a great gain in weight; but a history of great mental disturbance just before the first noticeable symptoms so greatly overshadowed all the others, as to make them insignificant in comparison; so marked was this that, in some instances, a pronounced case of diabetes mellitus developed within a very short time after the mental disturbance.

Suspense and great anxiety seem to be causes, rather than great joy, grief or fright. For instance, I have two well-marked cases in business men (both Hebrew), following close on the heels of business failure with the attendant mental strain. Three other cases in which the symptoms became apparent to the patient soon after several days' worry and acute mental strain over family or financial matters have recently come under my notice. Whether or not the above cited causes induce vaso-motor paralysis, I cannot say, but it seems probable. It is my opinion that close ob-

servation will reveal that a very heavy percentage of cases of diabetes mellitus can have their origin traced to the causes here set forth.

In my experience I have found that while dietary limitations decrease the amount of sugar, I have not been able to see that the general health has been markedly improved, and in some instances, the withdrawal of sweets, and other restrictions of diet have not materially lessened its excretion.

Until recently, I used in various forms and combinations all the drugs most recommended, having varying success, the record as a whole being not at all flattering, but the best results being obtained from codeine and arsenical preparations. Some two years ago my attention was called to arsenauro as a therapeutic agent for this disease, and as arsenic had on the whole given better results than any of the other drugs, I gave it an extended trial. The results in all cases were better than those with codeine or arsenic, and in the probably neurotic cases cures were effected in nearly every instance. In almost every case the amount of sugar became noticeably lessened within a period of ten days to two weeks; one case was practically cured in two months, and in others repeated tests showed no trace of sugar in from three to four months. The general health improved in every instance, the drug in no case causing any untoward disturbance, either local or general. In emaciated cases an increase in weight and a better color, due to a marked increase in red blood corpuscles, was noticed even before any marked diminution of the sugar occurred.

In conclusion, it may not be amiss to say that at least two of these cases first presented themselves to me on account of having been refused life insurance because of sugar in the urine, nor is it amiss to add that within the last few months both cases have been accepted for policies of good amounts, no sugar being found after repeated tests, the writer not being the examiner in either instance.

The prognosis of heart disease in children is considerably better than in adults. The tissues of the heart, and of all other organs, are in children more elastic than in adults; the limit of growth has not been reached and there is a natural tendency toward the production of normal structures.

Trosseau thinks that the appearance of iritis in a case of syphilis indicates a severe form of the disease, and a profound infection of the organism, whether it assumes the form of iritis, irido-choroiditis, retinitis or optic neuritis. In mild syphilis, ocular diseases are only occasionally observed, and are of short duration, yielding readily to treatment. Such is also the case in hereditary syphilis, in which the virus, being an attenuated one, does not beget ocular disease. All cases of syphilitic iritis should be crefully watched and energetically treated.

REPORT OF CASE OF PRIMARY LUPUS OF TONGUE.

By JOHN C. MURPHY, M. D., of St. Louis, Missouri.

IN CONSIDERING grave pathological lesions of the tongue we have to consider, principally, three varieties, namely: cancer, tuberculosis and syphilis. There are other diseases of the tongue besides these mentioned, but they are usually not of sufficient magnitude to endanger life. Of the three named, cancer, which is of the epithelial variety, is, of course, of the most importance. Tuberculosis is, however, almost as vital an issue. Primary syphilis of the tongue is a rare disease. It is with the differential diagnosis of the various conditions named that I wish to impress you, as it is only by early recognition and prompt action that we can hope to avert the frightful consequences of allowing operable cases to go unrecognized, as it is only in their incipiency that we can hope to offer a favorable prognosis in epithelium or primary tubercle of the tongue. That such cases do pass through the hands of some medical men without recognition, I am prepared to prove by the history of the case I present to you this evening.

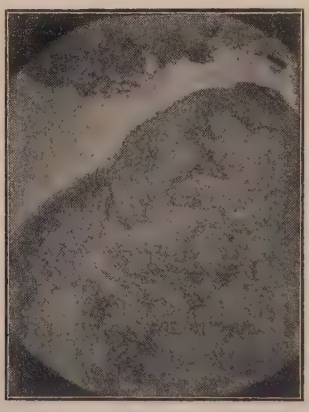
In attempting a diagnosis we must consider the history, age, sex, general condition of patient, duration of disease, etc. Syphilis of the tongue is usually of the tertiary variety, and is accompanied by other evidence of the disease. It occurs at all ages after puberty, is usually well-defined, and the glandular involvement is more marked; and, lastly, this type of ulcer yields to specific medication. It is between localized tuberculosis and epithelioma that the surgeon is most liable to err. But it would seem, in this age, when we have such a valuable aid as the microscope at our command, that we would press it into service when our own diagnostic skill had reached its limit. But, alas! how many men there are who are either too arrogant or ignorant to avail themselves of the many new aids to knowledge that science is constantly providing us with. The patient from whom this specimen was removed was in the hands of a certain medical man for weeks before I saw him, who treated the ulcer on his tongue as a simple sore, using silver nitrate and other caustics. The only result obtained was to stimulate the disease to increased vigor.

We should look with suspicion on all ulcers of the tongue that do not heal by the ordinary means, irrespective of age. Primary tuberculosis of the tongue is not of frequent occurrence, and, in the absence of tuberculosis in other organs, a mistake in diagnosis may happen. But it is just in such doubtful cases that the microscope is of such value. The macroscopic picture presented by tubercle and cancer may so closely resemble as to render a differentiation almost impossible.

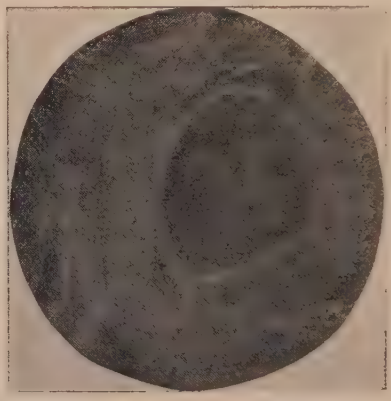
The specimen I present at this time is from the tongue of Mr. S., aged thirty-three years. He has enjoyed perfect health up to four months ago,

with the exception of an attack of gastritis at the age of twenty years, from which he made a good recovery.

About four months ago a small nodular mass about the size of a shot developed on the edge of his tongue a little to the right of the center. It grew rapidly, became indurated and broke down, forming an ulcer. He consulted a physician, and was treated as I have mentioned in the first part of my paper, and was assured that the trouble was of little moment. He consulted me on March 17th of this year, at which time the ulcer was quite extensive, and the induration was rapidly spreading. Pain was also a marked symptom. On account of the patient's age and family history (his mother dying of tuberculosis, and her sister of cancer of the breast), I was a little in doubt as to the character of his trouble. I presented the patient to Dr. Emory Lanphear, who was inclined to the belief that it was probably malignant. Dr. Carl Fisch made a microscopic examination from the diseased area, and was surprised to find that instead of epithelioma he had rather a rare form of primary lupus, resembling in character the same disease as found on the skin. I say "primary," as a careful physical examination does not reveal any evidence of tuberculosis elsewhere.



LEITZ, 2, 3.—Tuberculous granulation tissue and hypertrophic epithelium.



LEITZ, 2, 6.—Small tubercle. with giant cell between muscle fibers.

This case was operated by me at the Baptist Sanitarium, March 25th. I excised the diseased area, going widely into healthy tissue. The contour of the tongue was partially restored by bringing the cut surfaces together with interrupted silk sutures.

I do not look upon the prognosis in this case as particularly bright, in spite of the fact that all the infected portion was "apparently" removed, as the disease is liable to be revivified in the form of a pulmonary or miliary tuberculosis.

The principal object I have in presenting this specimen and the accompanying remarks is to emphasize the necessity of early recognition and the seizing of the golden opportunity for operation in the incipient stage of malignant and tuberculous disease of the tongue, and at a time when we are warranted in holding out a reasonable hope of the disease never returning.

By LAWRENCE IRWELL, M. A., B. C. L.

"**Whenever one** attempts to rise above the dead level of commonplace life, instantly the social screw begins to work, and down is brought upon him the tremendous weight of the socio-static press, and it squeezes him back into the mire of mediocrity, frequently crushing him to death in his bold attempt.—Boris Sidis, Ph. D., in "The Psychology of Suggestion," p. 312.

Carpets and Dust as the Agents of Disease.—Dust being now recognized as one of the most efficient vehicles for carrying disease germs, I think that the broom and the carpet-sweeper must be regarded as able assistants in the propagation of phthisis, as they send the dust into the air, where it is diffused by whatever breezes may be blowing around. The energetic lady, who has covered her head, but has omitted to protect her nose and mouth, digs the dust out of the carpet and stirs it out of the quiet corners where it has accumulated, and where it is doing comparatively little harm. After charging the air of the room with this living dust she conveys the residue to the yard, and the wind distributes it along the street. Then the sweeper, drawn by a couple of mules, comes along and carefully transfers this deadly waste from the road to the air, with the result that we inhale phthisis in concentrated form every day. The real wonder is that pulmonary diseases are not much more prevalent.

The broom, instead of serving any hygienic purpose, is one of the causes of the maintenance of organic dust in the air of the large cities of the world, and as such is to a great extent responsible for the spread of phthisis. The carpet is a breeding-ground for micro-organisms, many of them pathogenic, necessitating the use of the broom and the carpet-sweeper, both of which could be dispensed with if we could only make our womenkind understand the elementry principles of hygiene.

There is only one safe way for procuring the necessary cleanliness of the floors of the houses and the streets of cities, viz.: by the free use of water and mops in the rooms, and by the employment of sprinkling wagons on the streets. All floor coverings of the house—and all city roads—

ought to be so constructed as to facilitate the continual use of water—that is, if we want to fight phthisis in earnest.

The Food of Prehistoric Man.—An English surgeon, who is also a dentist, Mr. Charters White, in examining some skulls dating back from the stone age, noticed that several of the teeth, although quite free from caries, were thickly coated with tartar. It occurred to him that it would be possible by a rough analysis to identify any particles of food which might be imbedded in this natural concrete, and so reveal the character of the diet of prehistoric man.

Dissolving the tartar in weak acid a residue was left which, under the microscope, was found to consist of corn-husk particles, hairs from the outside of the husks, spiral vessels from vegetables, particles of starch, the point of a fish tooth, a conglomeration of oval cells, probably of fruit, the barblets of down, and portions of wool. In addition to this varied list there were some round, red bodies, the origin of which defied detection, and many sandy particles. These mineral fragments may have been attributable to the rough stones used in grinding the grain, and would account for the erosion of the masticating surfaces, which in many cases was strongly marked. This inquiry into the food of men who lived not less than four thousand years ago is a matter of great interest.

The Bread Question.—Referring to the question of white *versus* brown bread, discussed in the *Miscellany* for March, Dr. Lander Brunton's report may be found in the *British Medical Journal* of November 5, 1898, p. 1453.

The Real Character of the Pearl.—The presence of pearls in the shell of a mollusc was attributed in ancient times to congealed drops of dew or rain; and Pliny has left an elaborate account of the manner in which the phenomenon is brought about. Later investigations have, of course, given a more rational explanation for the occurrence of these ocean gems; and the common one is that the nucleus of the pearl is a piece of some foreign body which has got within the shell, and which the mollusc is unable to remove, but covers with layers of nacre, in order to reduce the irritation which its presence would necessarily cause. But, according to a paper recently read before the Paris (France) Academy of Sciences, by Mr. Leon Diquet, there is a distinction between fine pearls and these intrusive bodies coated with nacre. Moreover, he says that the latter have not the fine iridescence of the true "orient" pearl. The genuine pearl, he holds, has no connection with the shell itself, but is a pathological calcification, and seems to arise from parasites. It begins with a small sac of liquid, which becomes gelatinous and calcifies in a series of concentric layers, while at its center may be found a cavity holding organic matter, the remains of the parasites which produced it. If a pearl is a sort of carcinoma of a bivalve, it appears rather foolish to regard it as a

precious gem. Nobody looks upon it as a normal growth, and the idea of wearing a pathological excrescence of a mollusc as an ornament reminds one of barbaric times.

Evidences of Human Evolution.—The little fold of conjunctival tissue which may be found upon the inner side of the human eye is a remnant of an ancestor—probably a reptilian ancestor—which possessed a complete third eyelid, known as a nictitating membrane. In the horse, the remnant, the *plica semilunaris*, is sometimes sufficiently developed to interfere with the animal's sight. The third eyelid in a complete form may be seen in birds, and the eagle is said to look at the sun through it, which leads one to suppose that it must be transparent to its owner. Whenever one finds the third eyelid fully developed and functional in a reptile, it is almost a certainty that the possessor of it has not the power of moving the upper eyelid, and consequently the cleaning of the eyeball is delegated to the nictitating membrane.

Another example of human evolution is the *appendix vermiformis*, which some surgeons so dearly love to remove. It is the remnant of a herbivorous ancestor—an animal requiring, as all vegetarian animals require—an extended hollow sac to delay the passage of food, which is thus subjected to a lengthened process of digestion and absorption. When man's predecessors became flesh-eaters, this long sac ceased to be an advantage, and those individuals which were born with a limited cæcum had a better chance of surviving in the struggle for life than had those possessing the ordinary cæcum of the herbivora. As a consequence, man has finally developed, by means of natural selection, the present anatomical condition of the cæcum, in which the terminus (the appendix) has not grown in proportion with the rest of the sac. I know of no objections to this explanation, which I consider absolutely correct; but, in any event, it is more rational than the hypothesis that the appendix was placed in its present position by Providence in the interest of the surgeons.

In addition to man and the anthropoid apes, one other animal is blessed with a vermiform appendix—the wombat, an Australian marsupial.

Insurance Companies and Causes of Death.—I have before me an interesting book, "The History of the Prudential Insurance Company," which contains some useful information. But, on page 310, I find some of the errors against which I have been protesting for years. In order to use mortality statistics with intelligence, the names of the diseases which have caused death must be given. The names of the symptoms, such as jaundice, are valueless to anybody who wishes to compile accurate death returns. The mortality table of the Prudential Insurance Company giving the "thirty principle causes of death" contains "convulsions" and "dropsy," both of which are symptoms. It also contains "Bright's dis-

ease." If this term is intended to include all forms of inflammation of the kidneys, the one word "nephritis" should be used. Upon the other hand, if the term "Bright's disease" means simply that the urine of the deceased contained albumin, the information is insufficient, because it does not indicate the cause of death.

Diabetes mellitus does not appear among the thirty principal causes of death given by the Prudential Company. But, apart from all questions of improved diagnosis, I have reason to believe that it is on the increase. So little appears to be known of the pathology of this disorder, that, for statistical purposes, it ought to be put in a class which includes no other disease, except that uncommon complaint diabetes insipidus. I understand that diabetes mellitus: is now believed to be in some way connected with the medulla. At any rate, "a center has been demonstrated in the medulla which at least in part controls the activity of the kidneys."—N. S. Davis, Jr., in Hare's *Practical Therapeutics*.

An Exceptionally Low Death-Rate for a Large City.—Thanks to the efforts of Dr. Ernest Wende, the able Health Commissioner, the death-rate of Buffalo, New York, is now lower than that of any place of its size in the world. The population, according to the United States census of 1900, was over 352,000, and the mortality rate last year was 14.19 per 1000. After considerable opposition Dr. Wende has induced the city fathers to pass an ordinance prohibiting spitting in public places; but, in order to protect the supposed rights of the individual, streets and sidewalks are excluded from its operation, in spite of the Health Commissioner's protest.

I contemplate opening a school of hygiene for aldermen and politicians generally; the number of pupils ought to be large.

Mammary Glands and Teats of the Male.—The great variation in the position of the teats and mammary glands of many animals deserves attention, because it enables us to satisfactorily explain the existence of so-called supernumerary mammary glands and teats, which occur in human beings of both sexes. (The term polymasty is applied to the former condition, polythely to the latter.)

The increase in number, in both men and women, may be regarded as a return to a primitive condition, in which many glands were developed and many young were produced at a birth.

But how are we to account for the presence of such pronounced vestigal organs as the teats of the male human being? It is usually considered that they are inherited from the female, and it is possible that this explanation is correct. But when we find that in the monotremata, which are only found in Australasia, the mammary glands are almost equally developed in both the male and the female, it seems not improbable that there

was a period when both sexes may have taken an equal share in the rearing of the young.

It is certain that a functional condition of the mammary glands does occur in men. Humboldt records a case in which a man at the age of thirty-two was left in charge of a sucking child by the death of his wife. Not knowing how to rear it he, in despair, pressed it to his own bosom; and it is asserted that hypertrophy of his breast, with milk secretion sufficient for the rearing of the infant, was thereby induced. This story seems improbable, but it cannot be regarded as without foundation. Boys at the period of puberty do occasionally produce milk from somewhat swollen breasts; and male goats have been known to give milk which, on chemical analysis, was found to be quite as rich in casein as ordinary milk. It is said that castrated rams have been known to possess functional mammæ, and although I know of no reliable authority for the assertion, I do not suppose that castration would have any influence upon such an abnormality in the male.

The teats of some male bats are remarkably developed, but it has not been shown that they give milk. Further study of these bats is desirable.

A solution of quinine sulphate in glycerine is a good preventive for insect bites. Whether the effect is due to the toxic action of the quinine, or to the fact that insects may object to its taste, is not clearly established.

A Brazilian physician claims to have cured several cases of leprosy with rattlesnake poison. Several cases of leprosy supposed to have been cured by rattlesnake bites led him to make investigations.

Senile pruritus is readily relieved and frequently cured by simply rubbing the affected skin briskly with a soft brush until the overgrowth of superfluous, ill-nourished epithelium is removed.

Klebs-Loeffler bacilli are found in the throats of about eight per cent. of persons who have been exposed to diphtheria, but who have not contracted the disease. Experiments have also shown that the bacilli may be found in about one per cent. of unexposed persons.

Plaster of Paris bandages may be removed by the following simple method: Soak some cotton-wool in hydrogen dioxid; then with this moisten the splint down its entire length for a width of about half an inch. When it is thoroughly soaked, the plaster will be found in the same condition as when first put on, and the bandages only have to be cut with a pair of scissors, without any injury to the patient or any trouble whatever.

CORRESPONDENCE.

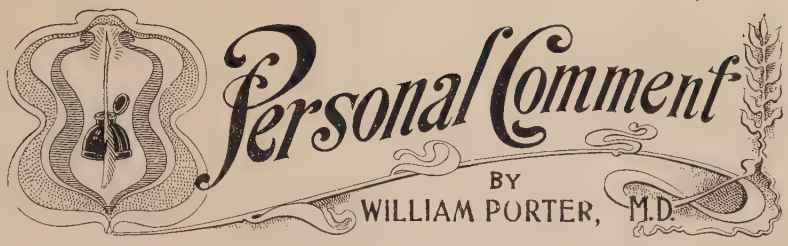
El Instituto Medico Moderno,
Calle de las Huertas, 10, Madrid, Spain.
Director, Dr. J. B. Busdraghi.
Editors Interstate Medical Journal, St. Louis, U. S. A.

Gentlemen:—I have read with much interest your valued editorial on "Why is not American Medical Research Recognized Abroad?" and have found in it many very just points. As a European medical man I should like to make a few remarks in this connection. Europeans find it hard to realize that in America there has arisen a great people with great cities; that new life has been imbued into these people, and that a medical profession is growing up of which the American people may well be proud.

It is lamentable that the thrift and value and enterprise of the American medical journals is not recognized abroad. It is also a pity that the great leaders in medicine in America are but little known by their colleagues beyond the Atlantic. We seldom see quotations from American journals in European journals, and if any do by chance appear in them, they are meager and indefinite and misleading, giving the chance reader the impression that all work in the States is superficial and unworthy of credence. It is deplorable that the European medical man fails to recognize the practical basis upon which the American works and the practical phase which he gives to theoretical considerations. It is an established fact that American hospital arrangements are marvelous, and deserving of great praise from us. It is also an indisputable fact that the American has given the world the best in the surgical instrument and apparatus line. Many chemical and pharmaceutical products of inestimable value are brought out in America, and these, too, meet the same fate as the other medical points referred to: they are unknown abroad.

To attempt in a measure to remedy these defects in the European system, I have founded an institution here in Madrid, under the name of "El Instituto Medico Moderno." This institution will have for its object the exposition of medicinal products, their importation and sale. At this institution I shall have all chemical products made in various countries, including America, also new and up-to-date surgical instruments. The profession is solicited for correspondence.

March 1, 1901.



SIR MORELL MAC KENZIE.

(PUBLISHED BY REQUEST.)

A LITTLE TRIBUTE AS A SMALL RETURN TO A LIFE THAT HAS MADE, TO ME, ALL LIVES MORE LOVABLE AND LIFE ITSELF BETTER WORTH THE LIVING.

TO WRITE of a great man is a great responsibility; to write truly of such a one to whom we owe much is a great trust. I cannot even at this time, years since I knew him, speak of Sir Morell MacKenzie without emotion. Why should that be thought strange! He was all that a preceptor and counselor could be; but more than all that, I learned to know him and to love him. Even then he had his trials, unknown to many, and I understand better than most could what he meant when in my house in St. Louis he said: "I wish you had remained in London, but you are happier here."

It is not my intention to make any apology for him or his acts; none are needed. Those who knew the man understood his work. Those who did not know him could never fully understand. In the first place, from a full knowledge of Sir Morell extending, by personal acquaintance and afterward by correspondence, for over a decade, I unhesitatingly say that he was singularly honest. His proud Highland blood forbade explanation, and though he chafed under unjust criticism and jealousy he gave no sign.

His uncompromising determination made him appear severe and dogmatic, yet he was ever just and always kind. He felt that the hands of the leaders of the old routine were against him. He was a specialist in a new department. It is true he had taken the degrees of the College of Physicians, and of the London University, and had written the prize essay of the former, and held many positions demanding skill and hard work, but was he not fast becoming a public favorite in an untraveled road in which he was a pioneer? Had he not moved somewhat out of the rut of the average medical man, and with independent thought and decisive action was proving a power among the powerful—a force where forcible lives were making of the Victorian age a new era?

It was this man, honest, active, thoughtful, aggressive, and self-poised who carried deep beneath the surface, but none the less warm for all that, a heart. I have seen the tears in his eyes after a recital of suf-

fering—some one else's suffering—and a minute after the lines of the clear-cut mouth and determined chin would grow more distinct and positive, as he encountered some new obstacle or opposition.

His was not a gentle nature except among those whom he loved. The chieftain's blood in his veins flowed hot and strong. He had no use for the rapier, but his words fell heavy and fast, like the broadsword of his fathers, when he led the charge on those who thought through him to arraign the truth. Yet this same ardor and intensity, under the most perfect control, made him the great authority in his department, and stamped him as one of the advanced thinkers and best logicians of his profession.

I need not speak of his scientific work. Few, even of those who hated him—I use the word advisedly, for such there were—denied his ability or the value of his writings. His great work on the upper air passages is yet a court of last resort. He had the faculty of being eminently practical. His deductions were ever tending to the exact, and he was always reaching out for "more light." Such, to my mind, biased it may be, but ever loyal and true to him, was the man who was called by royal command to leave his well-won place in the heart of London, and of England, and of Englishmen, and join his fate to that of the unfortunate Frederick.

Were I to be asked which of these two leaders was the greater sufferer, I should hesitate to answer. I believe it was MacKenzie. Placed in a wrong position, his hands tied, his words misquoted, his actions criticised, he saw himself drifting by force of circumstances toward a whirlpool of censure and reproach, the like of which is not found in the annals of our guild. All this time he was the kind, attentive, efficient physician and friend of the dying emperor. His position was peculiar. The German specialists had said that Frederick had incipient laryngeal cancer. MacKenzie, at his first examination, said the case was not proven and removed a small piece for examination. In his protocol of November 9th he gave as his opinion that "the disease was cancer, pointing out, however, that in the absence of microscopic evidence, such a diagnosis could not be made with certainty." Professor Virchow reported that there was no such evidence. Even then MacKenzie wrote me that "the larynx presented all the clinical appearance of malignant disease."

After the condition was sufficiently determined to found a positive diagnosis, the question of extirpation was discussed. Gerhardt had attempted removal of the growth by the cautery, and it was now a question between palliative and radical measures. The records showed that extirpation lessened rather than prolonged life. The average duration of life in cases of laryngeal cancer is two years where palliative treatment is followed, but far less where radical measures are adopted. Besides, the emperor, after hearing the unvarnished statements in the case, chose for himself.

MacKenzie proved himself either a knave or a martyr. To admit the

former is an insult to human judgment. I have just finished reading again, "Frederick the Noble." The book may not appeal to all, for it is the protest of a strong man wounded unto death in the house of his friends, and it has in it much of bitterness and just resentment—yet it has the ring of truth and honesty.

It was claimed by the College of Physicians and Surgeons that MacKenzie disregarded the demands of professional courtesy towards his German colleagues. Not so. What could be more generous than his praise of Hahn, Krause and others, and was he not to say a word when denounced by Bergmann and Gerhardt and villified by the press? Was there to be no answer when requested by members of the royal household to set the matter right before the public? More than this, is not a man's honor and his very life dearer than professional etiquette, or unwritten codes?

Censure from a recognized authority means much in England. Patients still crowded to see him; he was honored, knighted, and more than ever the idol of the populace, but MacKenzie was proud. The interdiction of his book in Germany and the action of rivals at home galled him. He had been under a great strain during his long attendance upon the royal Frederick, and now the public and private demands upon him and the grind of criticism and opposition left him little rest. He wrote me just before the end came, in his Christmas letter of '91: "I am so tired." I could hardly imagine MacKenzie saying that.

In the quiet church-yard at Wargrave-on-the-Thames lies the form of one who, more than any other man, was my model and inspiration, not only in professional excellence, but in nobleness and goodness and beauty of character. It matters not to me what others have thought—*I knew him.*

May I be permitted to place "this spray of Western pine" among the ivy leaves and laurel that cover his tablet:

The Master rests. After the day of toil
An urgent message came to him, and he,
Well used to sudden calls, in quiet haste,
With kind "good-night," went out and all was still,
And now his work's done; to him no more
Will come the suffering ones and those who need
The helping hand and words of goodly cheer.
His last response completed all his work.
O strong and gentle heart, ours is the loss
Who knew thee well and, knowing, loved thee more,
Ours is the loss and thine the great reward,
We crown thee victor, O thou kingly dead!

3886 Washington Boulevard, St. Louis.

MEDICAL TREATMENT.

Infantile syphilis may be treated by an inunction composed of diachylon plaster 3000 parts, calomel 1000 parts, and castor oil 300 parts. This plaster does not usually cause any softening or inflammation of the skin. The plaster is applied at different sites, and left in place for a week. There is rapid and continuous absorption, without digestive disturbances and suspension of absorption as soon as the plaster is removed.

Deep-seated inflammations of a chronic nature will often show rapid improvement under the use of the following combination: Icthyol, 45 grains; lead iodid, 45 grains; ammonium chlorid, 10 grains; petroleum, enough to make one ounce. It should be applied by rubbing upon the inflamed parts.

The treatment of strangulated hernia by local applications, prior to a cutting operation, is worthy of note. Recently an American surgeon reported a case of this nature in which the patient, a negro, accustomed to the use of tobacco, was treated by the application of a strong tobacco poultice to the affected region. After a short time the patient evinced signs of considerable systemic prostration; but the hernia was easily reduced. Ether compresses may be used, it being claimed that the refrigeration caused by such compression is greater than that which follows the application of an ice-bag.

During the month of January, 1901, the State Board of Health of Massachusetts found in its examination of food and drugs over twenty-nine per cent. of adulteration. Of course, only adulterated articles were examined, so this does not signify that twenty-nine per cent. of drugs and food are adulterated. Thirty-four per cent. of samples of milk, however, examined were found below the standard. Four milkmen were prosecuted.

Australian Bitter Bark in Influenza.—One of the drugs of the Addendum of the Brit. Pharmacopœia is *alstonia constricta*, known as bitter bark, fever bark, or Australian bitter bark. It belongs to the same order as strophanthus, and is a native of Queensland and New South Wales. It contains four alkaloids, one which alone possesses advantages from the therapeutist's standpoint, namely, alstonine. Alstonine is at present not sufficiently elaborated to make its use common, as it is very expensive. Both bark and alkaloids are very bitter, and the former has been employed by brewers to add bitterness to their ales. In Australia a decoction is said to be employed, and it is commonly known as "bitters." Preparations of the bark have been employed as a general tonic, and in certain stages of typhoid fever. The drug appears to act on the skin and kidneys as well as on the nervous system. The peculiar property of this bark is that it re-

sembles both quinine and strychnia. Physiologically, it does not act on frogs like strychnine, but, like quinine, the alkaloid alstonine paralyzes and finally kills amœbæ, paramœciua, but it is weaker than quinine. A general tincture of the bark has been employed as a tonic in influenza. Its employment is started as soon as the fever subsides, five to ten minims in chloroform being employed. It can also be administered before convalescence has set in because it acts as a good diuretic, eliminating the poison through the skin and kidneys.

Laryngeal Habit Spasm.—A report of a case of laryngeal habit spasm is made by Peter in the *Annals of Pediatry aud Gynecology* for March. The case was that of a boy who had chronic attacks, and would also have attacks of laryngeal spasm, taking the form of a clicking phonation during talking and when not talking. The normal vocal cords, with the history, gave the verity to the diagnosis. The main treatment consists in the regulation of the patient's life, with quietude. If any general treatment is necessary give tonics, or if the nervous system demands any special medication the bromides must be administered.

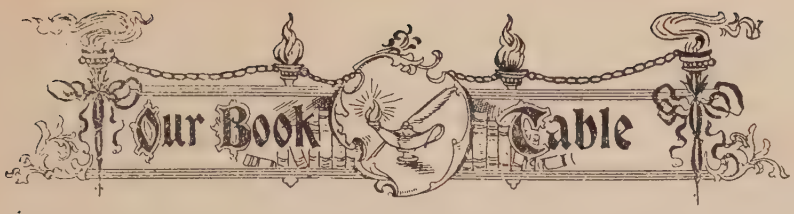
Organo-Therapeutics in Mental Disease.—Dr. C. C. Easterbrook, of the Royal Asylum, Morningside, Edinburgh, has contributed a very valuable addition to our knowledge of organo-therapeutics in mental disease. He points out that the immediate nutrition of any organ is of a twofold nature: hæmic and nervous, and depends upon a proper supply of blood pabulum and of trophic nerve impulses. The brain cortex directly dominates the nutrition of the efferent portion of the central nervous system. In the treatment of mental diseases with the thyroid extract, Dr. Easterbrook very justly contends that "many of the recoveries reported were not true tests, in that thyroid was employed when there was still a good chance of recovery by the ordinary methods of treatment." In Dr. Easterbrook's cases only cases were handled which were chronic or stationary. The results were, on the whole, unfavorable. Amongst the symptoms known to follow were loss of weight, increased bodily metabolism, quickening of the pulse, phosphaturia, and general cerebral stimulation. The thyroid treatment with women was more efficacious than that with men.—*The Lancet*, Feb. 9th.

Diphtheria Antitoxin by the Mouth.—McDonnell, in *The Lancet* for February 9th, narrates the treatment of a case of diphtheria by the administration of diphtheria antitoxin by the mouth, and he assumes that this is as good a way as by injection, inasmuch as success attended his efforts, amelioration taking place as rapidly as is the case with the hypodermatic method. It is a fact that the hypodermatic injection sometimes causes struggling on the part of the patient and thereby lessens chances for recovery, and we take it that McDonnell advocates the treatment of all such cases by administration of the antitoxin in that way. Otherwise we believe that the physician can best assure himself of success in the treat-

ment of this disease by putting it under the skin. The skin between the scapulæ or on the buttocks is about the best place, and here it can be accomplished by the skillfull practitioner in the majority of cases without the children making much trouble. A great deal depends upon the man "behind the syringe" in these cases.

Plague Cases in San Francisco.—Some weeks ago the government appointed as a special commission to investigate the plague in San Francisco the following gentlemen: Prof. Simon Flexner, of the University of Pennsylvania, chairman; Prof. F. G. Novy, of the University of Michigan, and Prof. L. S. Barker, of the University of Chicago. The appointment of this commission was made with the idea of having them co-operate with the medical officer of the U. S. Marine Hospital Service in the definite establishment of the existence of the plague in San Francisco. While there was no doubt in the minds of the officials of the Bureau, still it was deemed advisable to have outside expert consultation in this matter, in view of the fact that there has been considerable friction between the officers of the Service in the proper discharge of their duties and the local health and municipal officials of that city. It is well known that the efforts of the Service officers at hindering the spread of the plague were seriously hampered by the commercial-spirited officials of the city and state. Thanks to the above appointment, it was finally admitted by these selfsame officials that plague did exist in 'Frisco. Acting upon information gained by these gentlemen, a conference was held at Washington between a committee representing the governor of California, the mayor of San Francisco, business men interested, and the secretary of the treasury and the surgeon-general of the U. S. Marine Hospital Service, in which conference all the facts were discussed and a written agreement made for harmonious action in suppressive measures under the advice of Surgeon J. H. White, who is on the ground. On the return of this committee to 'Frisco, Surgean White wired that they had agreed to raise funds for immediate work as follows: Disinfect all infected houses, provide hospital for suspects, detention houses and morgue. Also, these funds were to be used for the general disinfection of Chinatown and betterment of air and light space.

It is quite encouraging to hear that at last the senseless people of 'Frisco have had it dawn upon them that their efforts at resisting the conscientious work of the Service officers were foolhardy, and really criminal. Their attitude from first to last was one that would have been sensible in the Middle Ages, in an epoch of ignorance and superstition, but which was strangely out of time in this enlightened period. We are glad to hear that light has dawned in the far West, and we feel assured now that the work of the Service officers, with the co-operation of the town people, will result in the elimination of the disease from the plague-stricken district.



A Treatise on Appendicitis. By GEORGE RYERSON FOWLER, M. D., Professor of Surgery in the New York Polyclinic, etc. Second Edition, Revised and Enlarged. Philadelphia and London: J. B. Lippincott Company. 1900.

Certainly the importance and frequency of the disease appendicitis justifies its consideration in a special book, and we are glad to make mention of the meritorious work of such a leader in surgery as Dr. Fowler. The subject is one which is under contention by many surgeons. With the aid of the book at hand the physician can quickly come to a just appreciation of the correct status of appendicitis. The volume first goes into a lucid explanation of the anatomy and pathology of the parts in the region of the "typhlon," and then the author gives a good account of the symptoms, diagnosis and treatment. The surgery of the disease is considered in great detail, embodying the different methods of operation. The author's own method of operation is fully explained, giving the sketches, etc. His ingenious method of retracting the abdominal walls in operating is well illustrated. The work is thorough, and, coming as it does from one of the masters in this disease, it deserves reading by every practitioner. It should be widely read. We have seen no better book on the subject than this one of Fowler's.

A System of Practical Therapeutics. By Eminent American and Foreign Authorities. Edited by HOBART AMORY HARE, M. D., Professor of Therapeutics, Jefferson Medical College; Physician to Jefferson College Hospital, etc., Philadelphia. New (second) edition, thoroughly revised. In three very handsome octavo volumes, containing 2593 pages, with 427 engravings, and 26 full-page colored plates. Per volume, cloth, $5.00, net; leather, $6.00, net; half morocco, $7.00, net. Lea Brothers & Co., Publishers, Philadelphia and New York. 1901.

Hare's "System of Therapeutics" is essentially a practical epitome of the subject, and can be vouched for to meet the demands of the practicing profession, as well as the needs of the beginner in medicine. The aim of the work is to dig into what is practical and present only that which bears the impress of fact. This aim has been well accomplished in every volume, and is impressed on the reader at first sight. There is much of recent investigation in the therapeutic field which the ordinary medical man cannot follow in chance journals which come to him. It can be as-

sured that the work at hand takes in all that is worth anything, and that it is thoroughly up-to-date. The book is not a mere collection of drugs and a recapitulation of their usages: it is an exhaustive treatise on therapeutics, with special attention to hygienic and dietary treatment of disease, as well as a rational discussion of the use of remedies in disease. We take pleasure in recommending it to the medical man.

Fischer—Infant-Feeding in Health and Disease. A Modern Book on all Methods of Feeding. For Students, Practitioners and Nurses. By LOUIS FISCHER, M. D., Attending Physician to the Children's Service of the New York German Poliklinik; Bacteriologist to St. Mark's Hospital; Professor of Diseases of Children in the New York School of Clinical Medicine; Attending Physician to the Children's Department of the West-side German Dispensary; Fellow of the New York Academy of Medicine, etc. Containing 52 illustrations, with 16 charts and tables, mostly original. 368 pages, 5¾x8 inches. Neatly bound in extra cloth. Price, $1.50, net. Delivered. F. A. Davis Company, Publishers, 1914–16 Cherry street, Philadelphia, Pa.

This is a very able exposition of the principles of infant-feeding, and is a good working manual for those whose function it is to handle sucklings and infants. The first part is devoted to a theoretical consideration of the anatomy and physiology of digestion and the action of bacteria on food, etc., all very important points. The chapters on direct feeding are good. The book certainly has a place in literature, and reflects credit on its author. There is no more important subject than that of infant-feeding, and we warmly welcome a book which promises to lay down proper methods of feeding.

Burlington Route for American Medical Association Meeting.—The Burlington Route, famous for its excellent passenger service, has again manifested its courteous regard for the medical profession by making a particularly low rate for the several medical meetings convening in St. Paul early in June. The rates as scheduled are for May 27th, 28th, 31st, and June 2d and 3d, good returning until June 15th for one fare plus two dollars [making $18 from St. Louis]. Leaving St. Louis the best train will be 2.05 p. m., arriving in St. Paul 8.40 a. m. next day. Further announcement next issue. Information furnished and reservations made by either INTERSTATE MEDICAL JOURNAL or J. G. Delaplaine, City Pass. Agent, Burlington Route, St. Louis.

SURGICAL SUGGESTIONS.

Fixation of Loose Kidneys.—Morris (in the *Medical Record* for February 23d) describes a method of fixating loose kidneys. In this operation a flap of capsule, including the larger part of the mesial surface of the kidney, is incised with a scalpel, and stripped up with the parenchyma attached to the convex border of the kidney. The flap of capsule is drawn through a slit in the psoas or quadratus muscle, and is then sutured in place.

In the past twenty years only 188 cases of gastric ulcers have been treated surgically, with a mortality of 16.4 per cent. This was up to six months ago. Since then many more cases have been operated, with better results. Gastro-enterostomy, above all others, is the one to be relied upon in the surgical treatment of gastric ulcer.

Excision of a gastric ulcer is unnecessary. Pyloroplasty is apt to be followed at a later period by recurring stenosis.

Pylorectomy is an unnecessarily severe operation for simple gastric ulcer, and presents no advantages over simple gastro-enterostomy.

Pylorodiosis, which consists in stretching the pyloric sphincter for the cure of gastric ulcer, is very dangerous and also apt to be followed by recurrence.

Perforation is one of the severe complications of gastric ulcer, and is apt to occur in fifteen per cent. of the cases. Hemorrhage occurs in eighty per cent. of all cases. Hour-glass contraction of the stomach occurs in some cases when the ulcer is situated in the middle of the organ.

Long states that drainage is employed in abdominal surgery to drain away septic material already existing; to afford an exit for the sepsis which the operator thinks he may have inflicted on his patient; to provoke adhesions, and thereby wall off processes from the general peritoneal cavity; to keep the peritoneal cavity free from blood and other fluids; to allow of a more certain knowledge of the conditions present in the abdominal cavity; gauze drains are sometimes employed as tampons to control hemorrhage.

Frankel demonstrated, in a series of twenty-one cases, that carboligni constitutes a splendid substitute for the poisonous iodoform, to which it proved inferior only as a deodorant.

NEW REMEDIES

The Successful Treatment of Tetanus with Chloretone—Report of a Case.—(By C. F. Baumeister, M. D., Panama, Iowa.)—On the 12th of July, 1900, I was called in consultation to see a man, twenty-eight years of age, and a farmer by occupation, who had been suffering for two days from trismus. Evidently, the bacillus tetani had been introduced through an injury of the foot caused by the patient stepping upon a nail two weeks before.

Although the wound had completely healed at the time of my visit, it was still very tender on pressure. The teeth were so tightly closed that the inferior maxilla was virtually immobile, and on account of orthotonos dyspnœa was very pronounced. The patient's temperature registered 102.2°, and the pulse rate was 125 a minute.

Under the anesthetic influence of chloroform the wound was treated *secundum artem*, and a hypodermic injection of one-fourth grain morphine sulphate and one-hundredth grain atropine sulphate was given every two or three hours.

Upon the following day, July 13th, I was somewhat surprised to find that the convulsive seizures were more severe than before, with occasional complete opisthotonos. I thereupon prescribed the following mixture:

℞ Chloretoni ..... ʒ iss
Spiritus vini rectificati ..... ʒ ss
Misce: sol. fiat et adde extracti nucis vomicæ fluidi,
Extracti digitalis fluidi ..... aa ♈ j
Syrupi amantii ..... q. s. ad. ʒ ij
M.

Of this solution, one teaspoonful was given every three hours by pouring the fluid between the cheek and the teeth, and the nurse was instructed to give the patient some morphine, if necessary. While it was possible, by the exercise of considerable patience, to administer the medicines by the mouth, we were compelled to give all nutriment by enema, since, on account of the great rigidity of the cervical muscles, there was extreme dysphagia. The obstinate constipation and the flatulence were relieved with clysters of soap and water.

Upon the 15th of July I found the patient in fair condition. He had not required any morphine since the chloretone mixture had been prescribed, two days before. The pulse rate was now about 80, and the temperature normal. The teeth could be separated one-fourth of an inch. As deglutition was performed with less difficulty, rectal alimentation was discontinued, and broths and milk were given through a tube. The orthotonos was not so severe, and the dyspnœa was markedly relieved. The chloretone mixture was continued, with an occasional hypodermatic injection of atropine sulphate. On the 18th of July the man was notably improving, and could separate the teeth half an inch. On the 22d of July he sat up in bed and could freely move the lower jaw, the muscular rigidity having almost entirely disappeared. The daily dose of chloretone was reduced to ten grains at night, and tonics were prescribed.

I did not see the patient again until July 29th, when he was perfectly well, had an excellent appetite, was free from nervous symptoms, and reported that he was sleeping well; in fact, he was in good health.

I wish to direct attention particularly to the fact that the heart was not in the least depressed by the chloretone, nor was the stomach disturbed. Furthermore, when morphine failed, chloretone controlled the spasms. I report this case with considerable satisfaction, as I am positive that chloretone saved this man's life. I might add, that when I was first called to this case I was unable to procure anti-tetanic serum without delay. Afterward, we had such good results from chloretone that we did not resort to the serum at all.

Labordine.—The attention of our readers was directed to the formula and therapeutics of this product in the February issue. It is a valuable antipyretic and analgesic, and is to be commended, particularly as it exercises a stimulating effect on the heart in addition to the aforementioned action. The writer has used labordine, both singly and in combination, in several cases with satisfactory results. One case, a patient suffering from a pronounced type of malarial fever, was but slightly influenced under ordinary quinine treatment, but responded well to laborine and quinine (*aa.* gr. v., t. i. d.), with double dosage two hours before expected paroxysm. Labordine, salol and quinine (*aa.* gr. iii.), four times daily, was used with good satisfaction in several cases of la grippe.

Saccharomyces Cerevisiæ in Furunculosis.—(By Ph. Chapelle, M. D., Ancien Interne des Hopitaux de Paris.)—Yeast (saccharomyces cerevisiæ) has long been recognized of therapeutical value in the treatment of furunculosis and certain skin diseases. The principal obstacle in the way of this treatment becoming universal has been the difficulty experienced in obtaining the yeast fresh and in preserving it free from secondary changes, which take place with great rapidity and render its distribution almost impossible; indeed, in hot weather these changes take place from one day to the other.

In order to place at the disposal of patients an accurately dosed medicament, not liable to undergo change, a pure desiccated yeast, which occupies but a small volume, and is possessed of the same therapeutical activity as the best fresh yeast, is the best form of administering it.

This is obtainable as cerevisine in the granulated form, which facilitates its administration and is more reliable than fresh yeast in its effect.

The activity of cerevisine has been established by numerous clinical observations, and, from a chemical point of view, it has been ascertained that in presence of sugary liquids it gives rise to alcoholic fermentation, with the gradual production of carbonic acid gas. These observations show clearly that the desiccation of yeast in nowise impairs its properties. Moreover, it never gives rise, like fresh yeast, to a sensation of heaviness on the stomach or acid regurgitations, so that it may safely be given to dyspeptics.

Cerevisine disintegrates rapidly in water, and succeeds admirably in the treatment of furuncles and boils, which promptly subside and disappear under its influence. In cases of acne, urticaria, psoriasis, herpes and eczema, its exhibition has also been followed by excellent results, this

effect being associated with a corresponding improvement in the general health.

The dose of cerevisine is from two to three teaspoonfuls daily before meals. This should be rubbed down with a little water or beer sweetened with sugar.

Dermapurine for Acne.—First, all irritating causes must be removed. Prescribe but very little soap of any kind, and when soap must be used, employ only dermapurine soap. Be careful about the use of face powder, best to advise against the use of it. If bromides are the cause, they must be discontinued, or the cure will not be permanent. If black-heads are the cause, they must be treated as directed under "black-heads." In any case, prescribe hot applications by means of a soft cloth, folded to several thicknesses and soaked in hot water, and to be applied as hot as it can be borne. A second cloth should be soaking and ready to be applied immediately after the first is cooled.

These applications are to be kept up for about an hour, and several times a day, if possible. After these applications, the skin is to be dried without rubbing. Then apply dermapurine. At bedtime apply a soft cloth that has been saturated with dermapurine.

The first effect of this treatment will be the reddening of the skin for a short time only, but the final result will be the cure of the very unsightly and often loathsome trouble.

The foregoing treatment is intended for chronic cases of acne; but in a mild case, as in the appearance of a few pin-head pimples, it will not be necessary to use the compress. Of course, the appropriate internal treatment should be followed at the same time, such as the interdiction of certain class of foods, the regulation of the bowels (by means of magnesia sulphas in carbonated water, say a teaspoonful every night), and sulphide of arsenic grain 1-60 three times a day, or any other preparation the physician may see indicated.

Eskay's Food.—This albuminized food has a place in the progressive physician's list of remedies, not alone for infants but equally for adults. It is easily retained on the stomach of convalescents from fever and other conditions calculated to interfere with the alimentary tract. Given just preceding and following surgical operations it will sometimes prevent and always lessen the nausea of anæsthesia.

Acneine.—This product represents a prescription containing zinc oxide, lanolin, oleum olivæ, sambucus, with the proper excipient. Many reports have been made as to its value in acne, eczema, pruritus, and other affections of the skin. It is also regarded as a valuable healing agent in ulcers, burns, etc. Samples and literature will be furnished by the Acneine Pharmacal Co., Omaha, Nebraska.

A prominent New York physician wrote to the Maltine Company: "If we are to have 'grip' all winter I am afraid that you will not be able to supply the demand for 'malto-yerbine.' I find it invaluable." Many others express the same opinion of malto-yerbine. Dr, Andrew H. Smith, before the New York Academy of Medicine, stated that his chief reliance to control the cough of la grippe was the internal administration of malto-yerbine.